

19

DRYING RACK

White Ash, Walnut



MAKING THE DRYING RACK

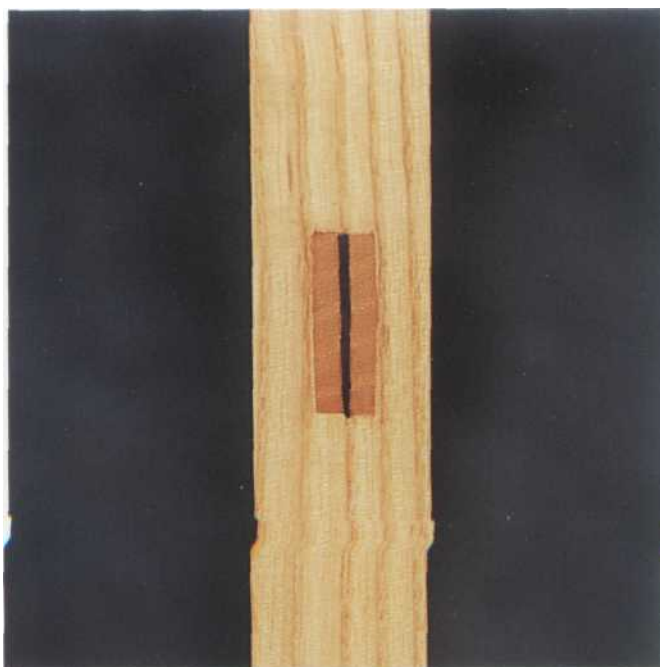
After milling the stock to the required thicknesses, widths and lengths, cut the feet with a band saw.

Form tenons on both ends of the posts and crossbars. This can be done by hand, using a tenon saw, or on a table saw fit with a stack of dado cutters.

Lay out and cut the twelve through mortises. Precision is essential with these tiny joints as the slightest error will multiply over the lengths of the posts, arms and crossbars. When test-fitting these tenons into their mortises, it's important to use a framing square (or other long-armed square) to make frequent checks of all right angles.

Notches for the walnut wedges should be no wider than *the kerf of a fine-toothed hacksaw*. After cutting these notches, dry-assemble the rack. Check angles and joints. Then, knock apart the rack, glue the joints, and drive the tiny walnut wedges into their notches.

After the glue has cured, saw off protruding wedges, pare tenons, and give the piece a final sanding.



Walnut wedges contrast with the ash through tenon and end grain.

FITTING MATERIAL TO TASK

All woods are not created equal. Among our American hardwoods, some—like cherry and walnut—display striking color. Others—such as oaks, ashes and hickories—have enormous resistance to breaking. Still others—like hard maple—can be turned or carved very finely without detail crumbling away as it might with a coarser wood.

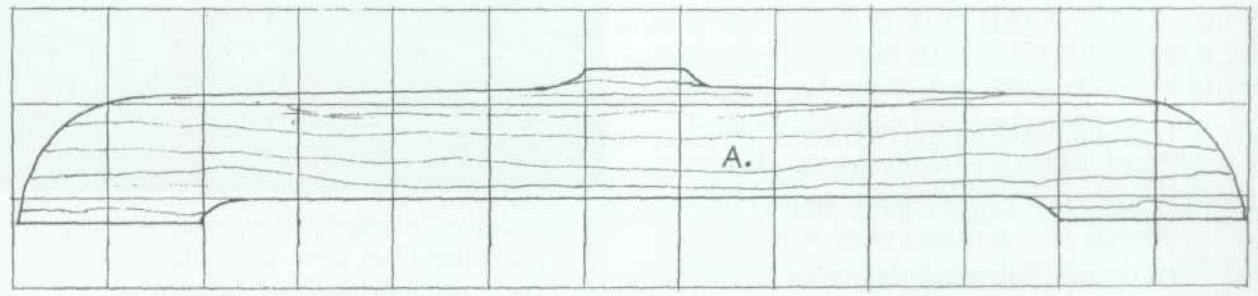
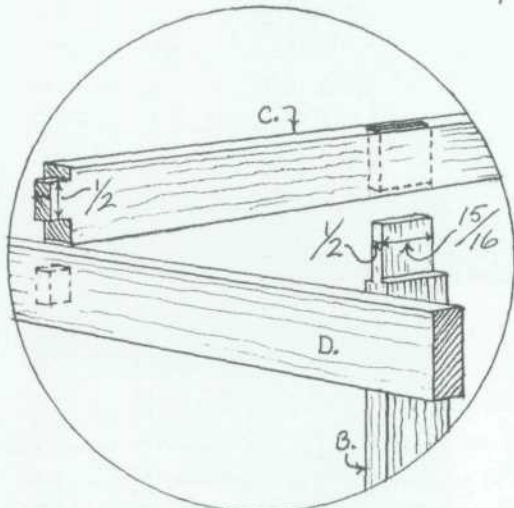
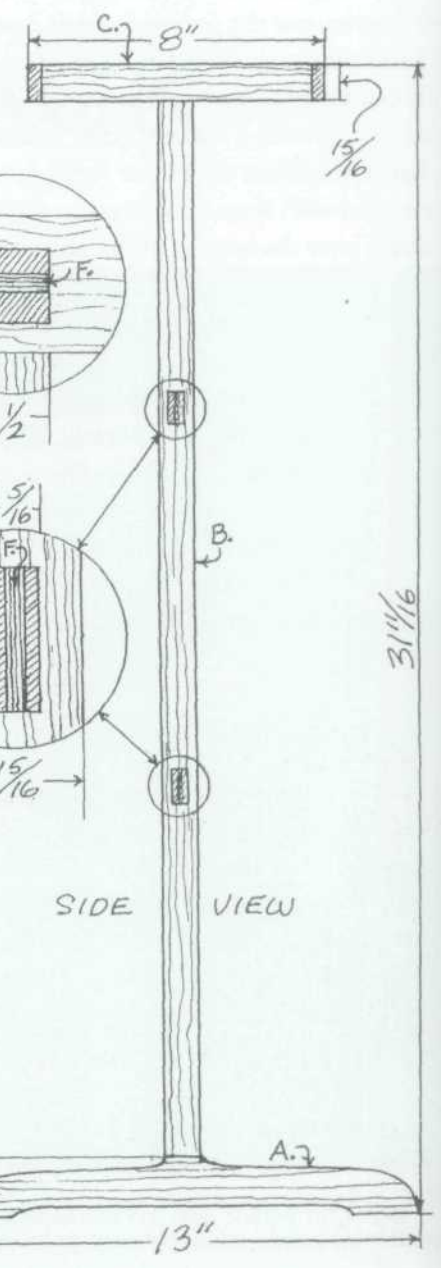
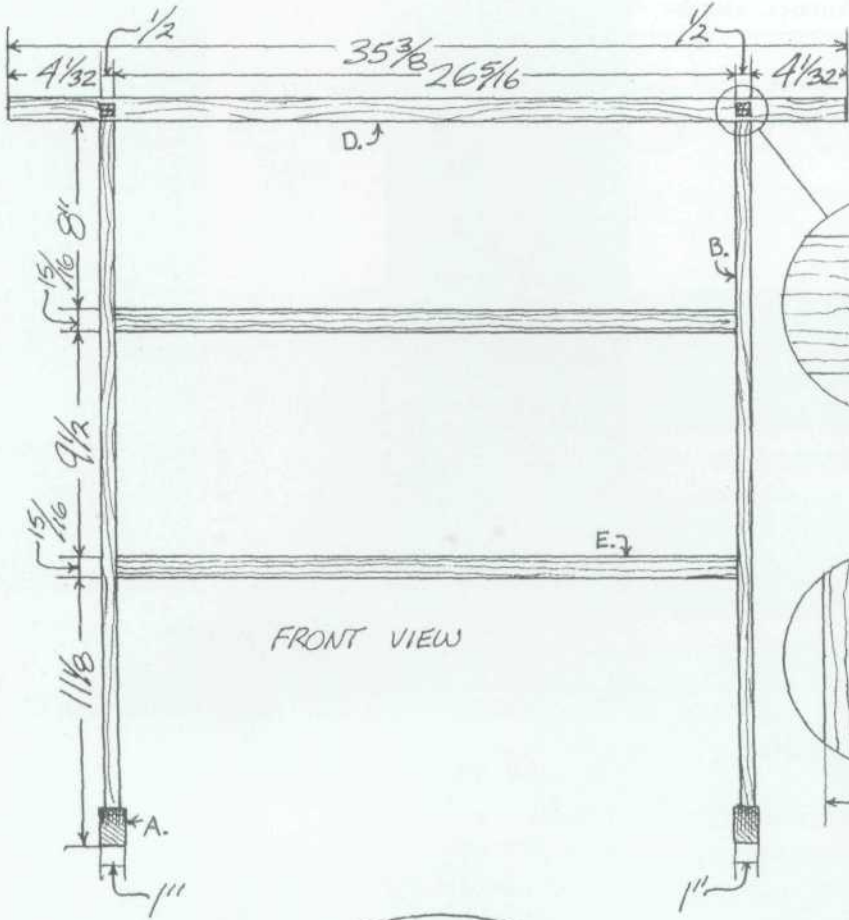
Traditionally, furniture was designed to take advantage of the different characteristics of the different species. The selection of species for the various parts of the Windsor chair illustrates this point. Windsor seats, which must be shaped to conform to the human bottom with hand tools—adzes, inshaves, travishers—were typically made of pine or poplar: softwoods relatively easy to manipulate. The legs were often turned from hard maple which, despite its nondescript color, possesses enormous strength and turns very nicely. Back spindles were usually shaved from white oak which, even when reduced to a tiny diameter, retains great resistance to breaking. This principle of matching material to task was also applied to casework. Primary woods (those used to fashion visible parts) were chosen for the beauty of their color and figure. Imported mahogany, walnut, cherry and figured maples were the traditional choices for this application. Secondary woods (those used to fashion interior components such as drawer parts) were selected for availability, the ease with which they could be worked. For this use, pine and poplar were common choices.

In general, eighteenth- and nineteenth-century woodwork reflected an intimate knowledge of the different qualities of different species of wood.

In an attempt to fit my material to my task, I chose ash for this drying rack because, of all the woods available in my shop, it offered the greatest strength when *planed so* thinly. This said, I should also point out that the original on which this rack is based was, inexplicably, built of pine.

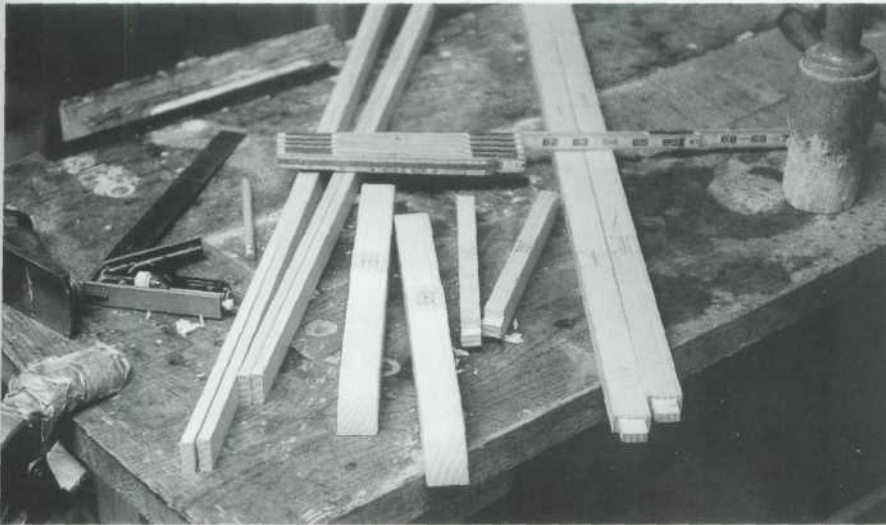


1 The Shakers delighted in doing much with little. In this single length of ash, there is more than enough material to build two of the Shaker-designed drying racks.



FITTING MATERIAL TO TASK (CONTINUED)

2 Tenons can be cut on the table saw with a stack of dado cutters.



3 After the parts have been dimensioned, shaped and tenoned, lay out and cut mortises.

MATERIALS LIST

A	Feet	2 pcs.	$1 \times 1\frac{1}{16} \times 13$
B	Post	2 pcs.	$\frac{1}{2} \times 1\frac{1}{16} \times 31\frac{1}{16}$
C	Crossbar	2 pcs.	$\frac{1}{2} \times 1\frac{1}{16} \times 8$
D	Arm	2 pcs.	$\frac{5}{16} \times 1\frac{1}{16} \times 35\frac{3}{8}$
E	Post brace	2 pcs.	$\frac{5}{16} \times 1\frac{1}{16} \times 27\frac{1}{16}$
F	Wedges	8 pcs.	$\frac{1}{8} \times$ various widths

**These are net measurements. Surplus should be added to the lengths to allow through tenons to be sanded flush.*